BY ORDER OF THE COMMANDER,
36TH AIR BASE WING (PACAF)

36 ABW INSTRUCTION 21-107

4 DECEMBER 2003

Maintenance

CRASH RECOVERY/HOT BRAKE/BARRIER ENGAGEMENT PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Policy Directive 21-1, *Managing Aerospace Equipment Maintenance*. This instruction applies to all personnel assigned to Andersen Air Force Base (AFB), including associate units. It establishes policies and procedures and assigns responsibilities for Crash Recovery, Hot Brakes and Barrier Engagement. Some of these actions may be taken in conjunction with Andersen AFB Operations Plan 32-1, *Base Disaster Preparedness Operations Plan*. This instruction implements local crash recovery procedures in accordance with HQ PACAF waiver to Crash Recovery Requirements, dated 21 May 03 to PACAFI 21-101, *Objective Wing Aircraft Maintenance*. This waiver specifically addresses the crash recovery portion of PACAFI 21-101.

1. General: Due to crew chief manning constraints and lack of assigned aircraft, Andersen AFB's crash recovery capability is very limited. HQ PACAF/LGMM waived portions of the crash recovery section in PACAFI 21-101 for these specific reasons. Although not required by current higher headquarter guidance, the 36th Maintenance Squadron (36 MXS) created the Initial Aircraft Response Team (IART) which will assume a limited role in aircraft recovery operations until the aircraft's owning organization's crash recovery team (or other designated team) arrives on station.

2. Location: The Initial Aircraft Response Team will respond to aircraft accidents on/or around Andersen AFB, as determined by the 36 ABW/CC.

3. IART Purpose and Composition:

3.1. The 36th Maintenance Squadron's Initial Aircraft Response Team is designed to assist the On-Scene Commander (OSC) using available crash recovery resources should an aircraft accident occur. The team will also be used to augment Transient Alert (TA) during contingency activities, heavy surges, and exercises.

3.2. The IART will be composed of maintenance personnel who possess strong situational awareness and can demonstrate sound judgement under stressful situations. Team composition will consist of: two team supervisors and 10 members.

4. Responsibilities:

4.1. The 36th Maintenance Squadron will:

4.1.1. The 36 MXS/CC is the process owner and final approving authority for IART composition, member's responsibilities, employment, and training requirements unless delegated in writing.

Furthermore, the Commander will determine what equipment will be maintained in the IART Response Trailer.

4.1.2. The 36 MXS/MXM will manage the IART program in its entirety, to include all tasks delegated by the 36MXS/CC. MXM will:

4.1.2.1. Establish an aircraft crash recovery program in accordance with PACAFI 21-101 and HQ PACAF Waiver to Crash Recovery Requirements, dated 21 May 03.

4.1.2.2. Provide initial and recurring training and coordinate training requirements beyond MXM capabilities through the 36 MXS Training Manager.

4.1.2.3. Document all training on AF Forms 623 and 797. CAMS course code 215 will be assigned to each IART member for recurring training.

4.1.2.4. Coordinate aircraft movement by conventional means (i.e. tow or taxi), if possible. Any lifting or aircraft movement requiring special aircraft Mission Design Series (MDS) experience and/or knowledge will not be performed until the arrival of the off-station crash recovery team. The IART will be available for the incoming team should they require assistance.

4.1.2.5. Perform scheduled inspections on all assigned crash recovery equipment.

4.1.2.6. Determine if the aircraft incident is beyond the capabilities of TA and the IART. If so, notify the Command Post who will in-turn notify the owning unit's crash recovery team.

4.1.3. The IART supervisor will accomplish the following recovery operations, if required:

4.1.3.1. Initiate recall/assembly of the IART. Initiate Aircraft Crash Recovery Checklist (**Attachment 1**) and notify 36 MXS/MXM of this action.

4.1.3.2. Ensure the aircraft is declared safe by the OSC and Explosive Ordnance Disposal.

4.1.3.3. Upon direction from the OSC, assist in identifying and marking all major aircraft components at the crash site using flags and tags. If needed, request assistance from the interim safety investigating maintenance member.

4.1.3.4. Coordinate with the Wing Safety Office and any investigation team to ensure disturbance of any evidence is minimized.

4.1.3.5. Perform a site survey of the accident site and determine required equipment.

4.1.3.6. Upon direction from the OSC, begin recovery operations as listed in this instruction and await further direction from the arriving crash recovery team.

4.1.3.7. Dispatch required personnel and equipment to the crash site. Coordinate all required maintenance actions.

4.1.3.8. Brief the OSC on all recovery operations.

4.1.3.9. Working with Security Forces to ensure personnel not in direct support of the incident are escorted out of the area via the Entry Control Point.

4.1.3.10. Coordinate with the Disaster Control Group and Contracting Office for additional equipment that may require purchase or lease.

4.1.4. All IART members will ensure individual training requirements are actively pursued until completion. Members will not be responsible to install ejection seat pins on aircraft in which they are not trained. If available, the aircrew or maintenance crew will install ejection seat pins. However, IART members will install gear ground safety pins and any safety devices that do not present a direct danger to themselves. If the aircraft is in a towable condition, the IART will coordinate with TA to move the aircraft to a designated parking area.

4.1.5. 36 MXS Vehicle NCO will provide squadron vehicles required for emergency response and recovery.

4.1.6. The TA will, during normal duty hours, notify 36 MXS/MXM and MXMX of all in-flight emergencies (IFE). After duty hours, TA will determine if MXMX notification is necessary. The TA will respond to all IFE calls.

4.2. The On-Scene Commander (OSC) will: determine when the aircraft is released to the IART and/or crash recovery team for recovery.

4.3. The 36th Air Base Wing Command Post will:

4.3.1. Provide aircraft accident notification to the owning organization.

4.3.2. Notify owning organization of any special requirements the off-station crash recovery team may need to know prior to their departure. The IART Chief will provide this information to the Command Post.

4.4. The 36th Operations Support Squadron will: notify TA of all IFEs via the secondary crash net.

4.5. The 36th Civil Engineer Squadron will:

4.5.1. Provide heavy equipment and operators used for emergency removal of aircraft from the runway. The decision for emergency removal will be made by the 36 ABW/CC or OSC and may include the use of a bulldozer to push the aircraft off the active runway.

4.5.2. The Fire Department and EOD will declare the aircraft safe from fire and/or explosive devices.

4.6. The 36th Communications Squadron will: provide up to an additional 20 land mobile radios, beyond the internal availability of the 36 MXS, for the recovery operation. Coordinate with DCG/36 CONS for the aquisition for additional LMR support.

4.7. The 36th Security Forces Squadron will: secure/cordon the accident scene and monitor incoming and outgoing personnel to ensure only authorized personnel enter the area.

4.8. The 36th Medical Group will: provide on-scene medical assistance and transport as required.

4.9. Trend Western will: provide additional required vehicles beyond the internal availability of the 36 MXS. The vehicles include, but are not limited to: two step vans, one pick-up truck, two 10-ton forklifts and a 5-ton tractor. The required vehicles will become the responsibility of the 36 MXS until no longer needed by the IART.

4.10. The 734th Air Mobility Squadron will: provide technical expertise, manpower and equipment when available.

5. Current Crash Recovery Capabilities:

5.1. Crash recovery capability is limited to recovering disabled fighter/attack type aircraft from the runway, i.e. a blown tire.

5.2. Any other crash recovery actions that are required will be the responsibility of the deployed unit or owning organization.

6. Hot Brake Procedures:

6.1. Designated Hot Brake holding areas are on the East and/or West End of the center ramp (Charlie Taxiway).

6.2. The TA will be responsible for marshalling and safing PACAF aircraft with hot brakes. The 734 AMS will assume responsibility for AMC aircraft.

6.3. The TA or 734 AMS will notify the Fire Department of any hot brake(s) condition. The Fire Department is required to monitor any movement of aircraft with overheated/hot brakes. The Fire Chief will declare the aircraft safe.

6.4. When the aircraft is declared fire safe and is released to TA or 734 AMS, TA will:

6.4.1. If the engine(s) are still running, instruct the pilot to shutdown the engines.

6.4.2. Chock the nose landing gear.

6.4.3. Have the pilot safe any ejection seats before departing the aircraft.

6.4.4. Inspect and evaluate brakes for heat dissipation. Use a blower to cool brakes, if required.

6.4.5. Tow PACAF aircraft to a designated parking location when declared safe. The 734 AMS will tow AMC aircraft.

7. Barrier Engagement: If a barrier engagement is anticipated, TA will respond to the North or South end of the runway depending on which barrier will be engaged. If the aircraft engages the barrier, TA will remain with the OSC/Fire Chief and proceed to the aircraft at the discretion of the Fire Chief. The Barrier Alert Crew will normally assist aircraft out of the barrier. If the emergency condition warrants engine shutdown, TA will install necessary safety pins and ground equipment, and remove aircraft from the barrier. As a minimum, the pilot will remain in the aircraft as brake operator until the aircraft has been parked.

8. Contingency Operations: In the event of a contingency operation such as a higher headquarters directed deployment, exercise, or a typhoon evacuation to Andersen AFB, 36 MXS/MXM and the TA Contract Manager will determine if the requirements to support inbound aircraft exceed the capabilities of Transient Alert. If their capabilities are exceeded, the IART will be recalled to support recovery opera-

tions of inbound aircraft. TA personnel will be required to provide training to the IART on specific aircraft recovery procedures. Any aircraft specific training will be accomplished on an as needed basis depending on the type of aircraft to be handled. At no time will an IART member be asked to do something he/she does not feel comfortable with or that jeopardizes safety in any way. The 36 MXS/MXM or 36 MXS/MXMX will determine the duration of this support. The 734 AMS will assume responsibility for AMC aircraft.

JOSEPH F. MUDD, JR., Colonel, USAF
Commander, 36th Air Base Wing

Attachment 1

AIRCRAFT CRASH RECOVERY CHECKLIST

NOTES:

- This checklist is only a guide and should not be used in place of appropriate Technical Orders (TO).

- Andersen AFB does not maintain a TO file on every transient aircraft; however, TA does maintain a limited TO library. Listed below are Technical Orders on hand for the maintenance and operation of assigned crash recovery equipment.

35DA4-16-1	Control Console for Pneumatic Bags
35D3-32-3-1	Wheel Dolly
35D5-5-3-1	Lifting Bags
35D6-1-106	Sling Inspection
35E11-3-53	Blower Operation
34Y1-135-51	MC-7 Air Cart

- The items below may not pertain to all types of crashed, damaged, or disabled aircraft and may not be applicable.

- All checklist items will be checked in the appropriate column either complied with (CW) or not applicable (NA).

- Use the following checklist as a guide to ensure safe and effective recovery operations.

CW	NA	Task
		IART supervisors will respond to IFE if required (all incidents will be treated as an IFE until crash is confirmed). Crash Confirmed YES/NO
		Recall or place the IART members on standby
		Request technical expertise and available manpower from the 734 AMS
		Assemble the IART in MXS Squadron conference room
		Brief the IART members on requirements and course of action

CW	NA	Task
		Request the following equipment and support, as needed: - Crane(s) and crane operator(s) - Tripod jacks - Maintenance stands - Hydraulic carts - Lights carts - Air compressors - Misc. powered/non-powered AGE - 40 ft flatbed - Tractor - Forklifts - Drivers for vehicles - Land Mobile Radios - Bulldozers to clear the runway - Any other equipment and operators deemed necessary by the team
		Check with Fire Department, Wing Safety, and Explosive Ordnance Disposal personnel to ensure the aircraft is safe before recovery personnel approach the aircraft
		If an aircraft crashes on Andersen AFB, the IART supervisor(s) will assess the damage and coordinate with the OSC on tentative plans/capabilities
		If an aircraft crashes off base, the IART supervisor(s) will respond to the crash site at the discretion of the OSC. The IART supervisor will assess the damage and coordinate with the OSC on tentative plans/capabilities

CW	NA	Task
		Provide an aircraft handling/safety briefing to the IART members prior to any maintenance actions. Briefing topics include: - Removal rings, watches, wire rim glasses, etc… - Use of hearing protection - Use of personal protective equipment (reflective belts, hard hats, gloves, overalls) - Aircraft specific danger areas (tailhooks, fuel tanks, chaff and flare, engines, etc) - Safe approach to the aircraft - Weather and terrain factors - Emergency evacuation procedures and assembly location - Work rest cycles - Dehydration prevention - Bio-Hazards/Chemical Hazards - Composites
		Ensure a fire bottle is available
		Ensure aircraft is chocked
		Ensure aircraft is grounded (if ground is available)
		Ensure all ordnance is safe prior to performing any maintenance actions
		Ensure all safety pins and/or downlocks are installed (if possible)
		Ensure all explosive/egress devices are disarmed prior to any maintenance
		Remove aircraft oxygen containers if possible
		Determine fuel quantity when possible. Approximate fuel on board_____ lbs.
		Notify and routinely brief the following personnel/organizations: - On-scene Commander - MXS Commander - MXS Maintenance Operations Officer/Superintendent - 36 ABW Command Post - Aircraft owning organization/crash recovery team - 734 AMS Supervision (if applicable)